



298231

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: MAY 14 1988

SUBJECT: Sandoval Zinc Company
SI: ILD053980454

J.U.

FROM: Jim Ursic
Technical Support UnitTO: Jeanne Griffin
Pre-Remedial Unit

I have reviewed and approved the state prepared site inspection report of the Sandoval Zinc Company.

Monitoring well and soil samples were taken at this site by the state. Although the monitoring well samples did not meet the emergency action levels for drinking water, the soil sample results were found to contain very high levels of zinc, lead, copper and nickel (see attached documents).

I am unaware of any emergency action levels for soil contamination, and recommend that your office track and forward this data to the emergency section for their review. The site is easily accessible and is unguarded, groundwater in this area has been reported at 7 feet below ground level.

Since this package was state prepared and does not have a tracking form, I am returning all information to your unit for tracking and follow-up by the emergency section to avoid having this package "lost" in the system.

If you have any questions please contact me at 353-1526.

Attachments

DATE: August 14, 1987
TO: Division File
FROM: Gregory W. Dunn *gwd*
SUBJECT: L1210500002--Marion County
Sandoval/Sandoval Zinc Company
Superfund/HRS

ILD 053 980 454

Narrative Summary

A site inspection was conducted on May 12, 1987 at the Sandoval Zinc Company by Greg Dunn and Rich Lange of the PA/SI Unit. The plant is located east of Sandoval, in the SE $\frac{1}{4}$, NE $\frac{1}{4}$ of Section 17, Township 2 North, Range 1 East, Marion County, Illinois. The plant initially processed zinc ore in 1890 and was converted to a secondary zinc smelter about 1915. Wastes produced prior to 1970 consisted of heavy metal-rich cinders and ashes, which were used for fill material around the plant building.

In order to comply with air pollution regulations, a scrubber was installed on the plant stack in 1970. The wastewater from the scrubber was disposed in a lagoon (on the southeast corner of the site) constructed from the cinders produced by past plant operations. The scrubber wastewater was allowed to seep into the ground until a sludge-like material remained. After a large amount of sludge had accumulated, the sludge was reprocessed for zinc recovery or allowed to dry before being sold to fertilizer companies. The lagoon was in use close to 10 years and measured 100 feet wide, 150 feet long by 4 feet deep.

The plant was almost completely destroyed by fire on June 27, 1972. The fire began at 10:00 a.m. when an oil line, that feeds the furnaces, broke and spilled oil onto the plant grounds. The fire destroyed all but (2) two buildings. The buildings were rebuilt and operations continued until 1985. On December 19, 1986, Sandoval Zinc Company's charter in the State of Illinois was dissolved.

During the inspection, 3 monitor wells were sampled and 4 sediment samples were taken. The sediment samples were taken in the east side stream (S101 and S102) and in the ditch on the west side of the facility (S201 and S202). Monitor wells G101, G102, and G103 were the monitor well sample points.

After the samples were taken and evidence taped, a walk through of all buildings was initiated. Every building, except the office, is easily accessible through open doors. Two drums, with an oily appearance, were found in the southernmost building on the southeastern part of the site. Other buildings contained crushed drums, old machinery and 3 to 4 inches of dust. Departure of the site was at 6:30 p.m.

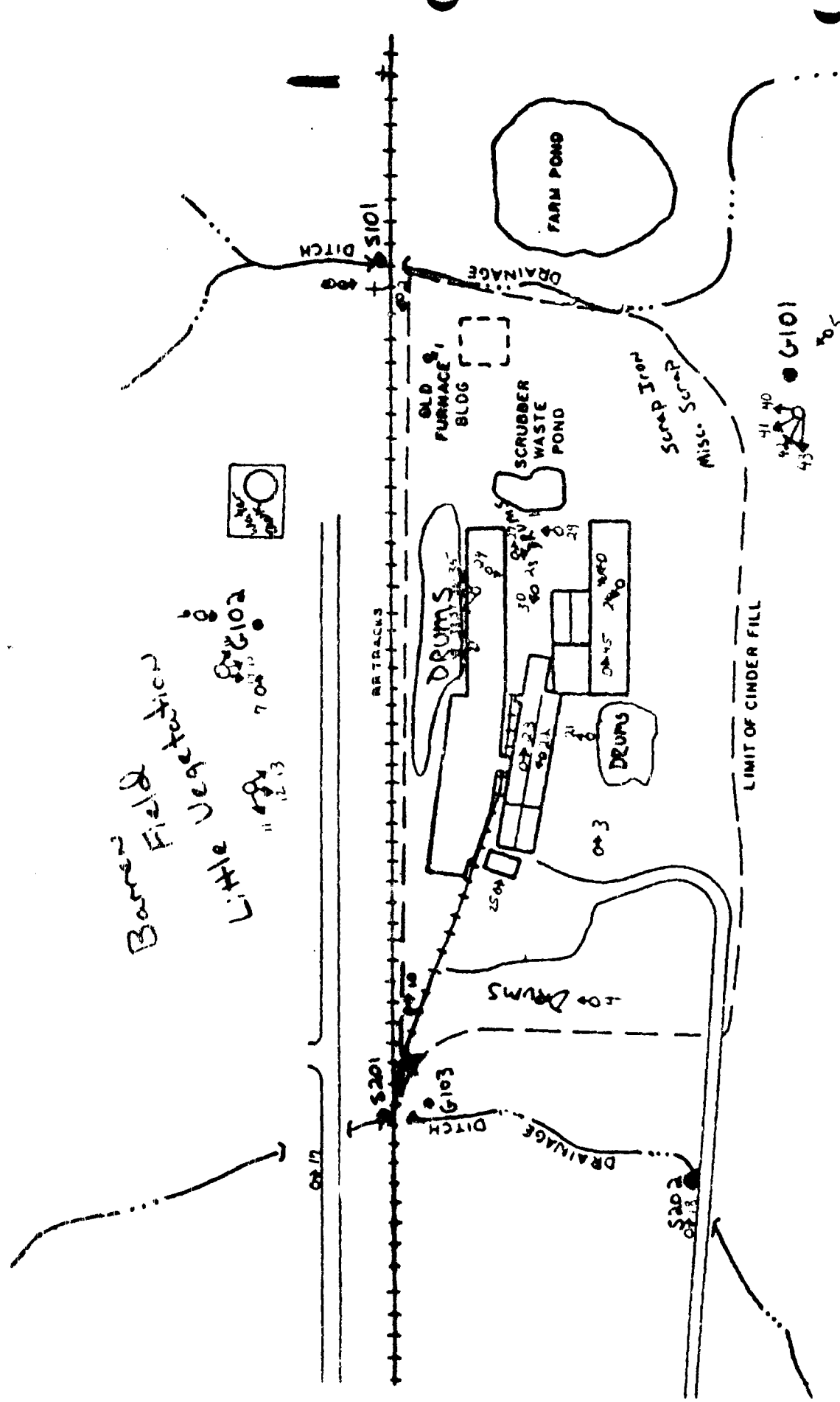
Rich Lange of the PA/SI Unit returned to the site on May 23, 1987 to retrieve papers that were scattered on the floors. Among the collected papers are O.S.H.A. violations, employee blood level results for lead, and analyses on incoming or outgoing loads of materials.

An owner of the Sandoval Zinc Company has not yet been determined. According to the Marion County Clerk's office, only one land transaction occurred. The transaction was a quit claim deed in 1936 from M. Wheill Metals Company to Sandoval Zinc Company. A corporate history search may be needed to determine owners name.

GD:kh/e-1

cc: Don Josif
Southern Region

Barren Field
Little Vegetation
G102
70
11
2,3



Barren Field
Little Vegetation

- ⊙ pictures ; Direction
- G101 Monitor well locations
! Samples
- ⊙ S101 Surface water locations
! Samples

IEPA ANALYSIS PROGRAM
Report of INORGANIC Results
Soil Samples

Site ID : S202
 Sample # : 87002407

PARAMETER	REMARKS (see inst.)	VALUE (ug/kg)	DILUTION FACTOR
Aluminum		10000000	1
Antimony	URE+	76000	3
Arsenic		24900	5
Barium		301000	1
Beryllium	U	1000	1
Cadmium		11200	1
Calcium		18100000	10
Chromium		41400	1
Cobalt		10600	1
Copper		1370000	10
Iron		41600000	1
Lead		4862000	10
Magnesium		2140000	1
Manganese		749000	1
Mercury		670	1
Potassium		738000	1
Nickel		384000	1
Selenium	URE	620	1
Silver	R	1500	1
Thallium		890	1
Tin		373000	1
Sodium		738000	1
Vanadium		33600	1
Zinc		44780000	40
Cyanide	U	250	1
Sulfate		110200	1
Sulfide	U	5000	1



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL0 053880454

III. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY
(Check all that apply)

SURFACE WELL
COMMUNITY A ☒ B ☐
NON-COMMUNITY C ☐ D ☒

02 STATUS

ENDANGERED AFFECTED MONITORED
A ☐ B ☐ C ☐
D ☐ E ☐ F ☐

03 DISTANCE TO SITE

A. 5.0 (mi)
B. 0.45 (mi)

IV. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING
(Other sources available)
☐ C. COMMERCIAL INDUSTRIAL IRRIGATION ☐ D. NOT USED, UNRELIABLE
(Provide other sources available)
COMMERCIAL INDUSTRIAL IRRIGATION
(No other water source available)

02 POPULATION SERVED BY GROUND WATER 500

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.45 (mi)

04 DEPTH TO GROUNDWATER

7 (ft)

05 DIRECTION OF GROUNDWATER FLOW

WSW

06 DEPTH TO AQUIFER
OF CONCERN

18 (ft)

07 POTENTIAL YIELD
OF AQUIFER

UNKNOWN (gpd)

08 SOLE SOURCE AQUIFER

☐ YES ☒ NO

09 DESCRIPTION OF WELLS (including location, depth, and location relative to structures and buildings)

Sec 8, T2N, R1E SE, SE, SE 20 feet deep, drinking water
Sec 8, T2N, R1E NE, NW, NE 20 feet deep drinking
Sec 4 T2N, R1E NW, NW, NW 27 ft deep drinking
Sec 4 T2N, R1E SE, SE, SE 13-14 ft drinking

Sec 16 T2N, R1E NW, NE, NE 15 ft drinking
Sec 16 T2N, R1E SE, SE, SW 14 ft drinking

10 DISCHARGE AREA

☐ YES ☒ NO
COMMENTS

11 DISCHARGE AREA

☐ YES ☒ NO
COMMENTS

V. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR RECREATION
DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY
IMPORTANT RESOURCES ☐ C. COMMERCIAL INDUSTRIAL ☒ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:

Prairie Creek

AFFECTED

DISTANCE TO SITE

☐

0.5 (mi)

☐

☐

VI. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE

A. 1799
NO OF PERSONS

TWO (2) MILES OF SITE

B. 2126
NO OF PERSONS

THREE (3) MILES OF SITE

C. 3631
NO OF PERSONS

02 DISTANCE TO NEAREST POPULATION

0.28 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

~600

04 DISTANCE TO NEAREST OFF-SITE BUILDING

0.14 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural village, densely populated urban area)

The City of Sandoval is less than 1/2 mile away from site. West Side of site is a rural village (Sandoval), North, South and East of site is rural farm land.

3151 JLNW
(BOULDER)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

89°07'30"
38°37'30"

PATOKA 9 MI
FAIRMAN 3.6 MI
316000m E

317

318

5'

31

427700m N

EAST ST. LOUIS 60 MI.
SHATTUCK 4 MI.

4276

4275

4274

4273

35'

4272

U.S. 460
LL 177

